IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS

NO SPILL INC., **Plaintiff,** **v.** **SCEPTER CANADA, INC., et al.,** **Defendants.**	**Case No. 2:18-cv-02681-HLT**

MEMORANDUM AND ORDER

This is a patent infringement case about flame mitigation devices (FMD) used in portable fuel containers. Plaintiff asserts that Defendants' portable fuel containers infringe various claims of its two related United States Patents: 9,174,075 ('075 Patent) and 10,029,132 ('132 Patent).[1] The parties dispute the construction of three groups of terms in the asserted patents and agree on the construction of two terms. Doc. 231. The Court construes the terms as follows:

Terms	Construction
retained quantity of the liquid fuel is sufficient to provide a fuel-air mixture proximate to the main container opening that is too rich to support combustion.	retained quantity of the liquid fuel is sufficient to provide a fuel vapor-air mixture proximate to the main container opening that is above the upper flammability limit
retained quantity of the liquid fuel is sufficient to provide a fuel-air mixture within the fuel retention structure that is too rich to support combustion	retained quantity of the liquid fuel is sufficient to provide a fuel vapor-air mixture within the fuel retention structure that is above the upper flammability limit
retained quantity of the liquid fuel	no construction required

[1] The '075 Patent is the parent, and the '132 is a continuation.

Terms	Construction
a quantity of the liquid fuel	no construction required
proximate to the main container opening	no construction required
flash suppressor	a structure configured to retain sufficient liquid fuel to inhibit combustion
fuel retention structure	a structure that retains fuel
average length of the perforation	average thickness of the flash suppressor walls in which the perforations are located

I. LEGAL STANDARD

The conventional claim construction analysis is guided by the Federal Circuit's en banc opinion in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005). Courts give a claim term its plain and ordinary meaning, which is "the meaning that the term would have to a person of ordinary skill in the art [(POSITA)] in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1313. Courts look to several sources to determine how a POSITA would understand a claim term including "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Id.* at 1314 (citation omitted).

The Federal Circuit discussed the intrinsic sources and explained that the claims themselves provide "substantial guidance as to the meaning of particular claim terms." *Id.* The other claims in the patent—both asserted and unasserted—can be valuable sources about the meaning of a claim term. *Id.* Because the claims do not stand alone, the specification is "always

highly relevant to the claim construction analysis" and "is the single best guide to the meaning of a disputed term." *Id.* at 1315 (internal quotation and citation omitted). And the prosecution history also helps demonstrate how the inventor understood the patent and whether the inventor limited the scope of the claims to obtain his patent. *Id.* at 1317.

The Federal Circuit also discussed the extrinsic sources, which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff'd* 517 U.S. 370 (1996)). Extrinsic evidence in the form of expert testimony may be useful for a variety of reasons "such as to provide background on the technology at issue, to explain how an invention works, to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a [POSITA], or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Id.* at 1318.

II. DISPUTED TERMS

The parties dispute three groups of terms and agree on the construction of two terms. Doc. 231. The Court resolves the disputed groups below and agrees with the proposed constructions for the remaining two terms.

A. Too-Rich-To-Combust Terms

Several of the disputed claim terms fall into this group. Claim 1 of the '075 Patent is exemplary of these claim terms and states:

> A fuel container comprising:
>
> a hollow tank body defining a fuel-receiving chamber and a main container opening for permitting flow of a liquid fuel into and out of the fuel-receiving chamber;
>
> a fuel dispensing assembly coupled to the tank body proximate the main container opening and configured to dispense the liquid fuel from the container; and

> a fuel retention structure located proximate the main container opening and extending generally downwardly into the fuel-receiving chamber,
>
> wherein the fuel retention structure comprises a plurality of perforations through which the liquid fuel must flow in order to dispense the liquid fuel from the container,
>
> wherein the fuel retention structure is configured to retain a quantity of the liquid fuel in the chamber when the container is tipped or inverted to dispense the liquid fuel therefrom,
>
> wherein the retained quantity of the liquid fuel is sufficient to provide a fuel-air mixture proximate to the main container opening that is too rich to support combustion.

'075 Patent 11:5-25.

Plaintiff contends these terms do not require construction but alternatively proposes a construction. Defendants contend the claims including these terms are indefinite. Defendants' position stems from the statutory requirement in 35 U.S.C. § 112, ¶ 2, which requires that a patent claim particularly point out and distinctly claim the subject matter that the applicant regards as his invention. The Supreme Court interprets the definiteness language of § 112, ¶ 2 as requiring:

> that a patent's claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty. The definiteness requirement, so understood, mandates clarity, while recognizing that absolute precision is unattainable.

Nautilus, Inc. v. Biosig Instruments, Inc., 572 U.S. 898, 910 (2014).

The parties do not meaningfully dispute the qualification of a POSITA, so the question before the Court is whether the claims inform a POSITA about the scope of the invention with reasonable certainty when viewed in light of the specification and prosecution history. The Court generally agrees with Plaintiff's alternative construction that a POSITA would have understood with reasonable certainty the scope of the invention and the meaning of the "too rich to combust" terms.

Starting with the claim language, the claims recite a fuel retention structure that is configured to retain a quantity of liquid fuel in the chamber wherein the retained quantity of liquid is sufficient to provide a fuel-air mixture that is too rich to support combustion. *See, e.g.*, '075 Patent 11:5-25, 12:14-40; *see also* '132 Patent 12:45-58. The specification repeatedly describes this too-rich-to-combust concept. It notes that:

> The present invention concerns a portable container intended for holding and dispensing flammable fuels. More particularly, it is concerned with an improved fuel container design which seeks to inhibit even the possibility of explosions by intentionally retaining a quantity of fuel proximate to an opening in order to provide a fuel-air mixture within the container that is too rich to support combustion.

'075 Patent 1:19-25. This portion of the specification connects the too-rich-to-combust concept with the fuel-air mixture. The specification then reiterates that connection by stating that the present invention seeks to accomplish this goal by employing an apparatus with "an overly rich fuel-to-air ratio" in "the portable fuel container, thus preventing the possibility of combustion." *Id.* at 2:30-35. Next, the specification discusses some of the scientific principles underlying the connection between combustibility and fuel-air ratio:

> As noted above, it is accepted scientific fact that when fuel and air are present and their mixture is within a given combustible range, combustion will occur if the mixture is ignited. If the mixture of fuel and air is perfect (a stoichiometric mixture), complete combustion is achieved and both the fuel and the air are totally consumed during the combustion event. Combustion may also occur if the mixture is slightly lean of fuel, but if too lean (i.e., not enough fuel is present) combustion cannot occur. Similarly, combustion may occur if the mixture has slightly more fuel than a stoichiometric mix, but if the fuel-air mixture has too much fuel (becoming too rich), combustion cannot occur in this condition either.
>
> The present invention seeks to employ this latter circumstance—a situation where the fuel-air mixture is too rich—to inhibit combustion within the portable fuel container where, for example, fuel is being poured directly from the container opening onto an ignition source or within a controlled laboratory where fuel is

> "weather" and maintained at an artificial temperature to establish a condition ripe for explosion.

Id. at 2:36-55 (emphasis added). This section explains that the present invention inhibits combustion by employing a fuel-air mixture that is too fuel rich.

The prosecution history also connects the too-rich-to-combust concept with a fuel-air mixture that is too fuel rich. The patent examiner rejected the '075 Patent claims as anticipated or rendered obvious by Rasmussen (United States Patent 2,275,318) in a December 15, 2014 non-final office action. Doc. 194-14, at 66. The applicant amended the claims and responded to the office action after having a telephonic interview with the examiner. Doc. 194-15, at 17. Notably, the applicant amended the claims to add that the fuel retention structure retains a quantity of liquid fuel that is "too rich to support combustion." *Id.* at 18, 21, and 25. The applicant then traversed the examiner's invalidity rejection and submitted a declaration by the inventor Thomas Cray (Cray Declaration). The applicant's response explained that:

> As further provided in the [Cray Declaration] attached hereto, a particular mixture range of fuel and air is required to support combustion. As such, if there is too much air in the fuel-air mixture (i.e., fuel lean), then combustion is not possible. Alternatively, if there is too much fuel in the fuel-air mixture (i.e., fuel rich), then combustion is not possible. Independent claims 1 and 14 of the present application require a fuel retention structure capable of retaining a quantity of liquid fuel that creates a fuel-air mixture too rich to support combustion (i.e., fuel rich). Applicant submits that Rasmussen does not disclose retaining a quantity of liquid fuel that is [sic] creates a fuel-air mixture too rich to support combustion, and further, Applicant submits that the wire guard cylinders 11, 12 of Rasmussen are incapable of performing as such.

Id. at 26 (emphasis added) (internal citations to Cray Declaration omitted).

The Cray Declaration also connected the too-rich-to-combust concept with a fuel-air mixture that is too fuel rich and detailed results from tests performed by Cray. *Id.* at 32-42. The Cray Declaration repeated the scientific principles discussed in the applicant's response and

outlined a three-step test that included submerging a device in gasoline, removing it from the gasoline, and inserting and activating a spark generator inside the device to determine whether the generated spark would cause a combustion flame to occur. *Id.* The test determined the amount of fuel retained by three different structures and determined whether such an amount of retained fuel was sufficient to create a fuel-air mixture too rich to support combustion. The results showed that the two prior art structures retained very little fuel and caught fire after being submerged and subjected to a spark generator. But the claimed structure retained about 5 mL of liquid fuel, which was sufficient to create a too-rich-to-combust environment and combustion did not occur when subjected to a spark generator. In sum, the intrinsic record repeatedly ties the too-rich-to-combust concept with a fuel-air mixture that is fuel rich.

The extrinsic record also discusses the too-rich-to-combust concept and reinforces the intrinsic record. Plaintiff's expert, Dr. Richard Roby, explains that "too rich to combust" is a fundamental concept and then connects it to flammability limits:

> The concept of "too rich to combust" is a fundamental one in the combustion and fire safety industry, as well as in the fields of chemical, mechanical, and fire protection engineering. An initial course in combustion or fire dynamics at either the undergraduate or graduate level would introduce the concept of a premixed flame. By definition, a premixed flame is one where the fuel and air are mixed at the molecular level before combustion takes place. An example is the flame in the cylinder of a gasoline-fueled, spark-ignition engine. These premixed flames are characterized by flammability limits which define the range of fuel/air mixtures that are capable of sustaining a self-propagating flame. Outside these flammability limits either there is too much air and not enough fuel to sustain flame propagation or too much fuel and not enough air to sustain flame propagation. These limiting mixtures are designated as the lower flammability limit (LFL) and the upper flammability limit (UFL), respectively. Flame propagation can only occur in mixtures between these two limits. Anyone considered to be a POSITA in the art at issue in this case must have knowledge and understanding of this fundamental concept in combustion and fire safety.

Doc. 194-22 ¶ 73 (emphasis added). Defendants admit that "a fuel-air mixture that is 'fuel rich' or 'too rich to combust' is also referred to as a mixture above the [UFL]." Doc. 219, at 8. And Defendants' expert, Dr. Glen Stevick, confirms that a POSITA understands the terms UFL and LFL. Doc. 226-3, at 5 (confirming that a POSITA understands these terms and that UFL means "a term for the upper range of percent hydrocarbon or percent fuel, if you will, on a volumetric basis that will – is ignitable"); *see also* Doc. 208-2 ¶ 38 ("Moreover, the generally accepted definition of the upper flammability limit is 'that state at which steady propagation of a one-dimensional premixed flame fails to be possible.'"); Doc. 219, at 22 (recognizing that the general concept of "fuel rich" or "UFL" may be understood by a POSITA).

Reading the entirety of the intrinsic and extrinsic record together, the Court finds that a POSITA would have understood the term in claim 1 of the '075 Patent and claim 17 of the '132 Patent to mean "retained quantity of the liquid fuel is sufficient to provide a fuel vapor-air mixture proximate to the main container opening that is above the upper flammability limit." And, relatedly, a POSITA would have understood the term in claim 12 of the '075 Patent to mean "retained quantity of the liquid fuel is sufficient to provide a fuel vapor-air mixture within the fuel retention structure that is above the upper flammability limit."

Defendants strongly argue against these constructions and contend that the too-rich-to-combust terms are indefinite because "the sole 'test' disclosed in the intrinsic evidence cannot determine whether the claimed fuel-air mixture is 'too rich to combust.'" Doc. 219, at 6. Defendants' argument essentially goes that the applicant limited this claim term to the three-step test in the Cray Declaration and that the three-step test is insufficient because it only determines combustion or no combustion without accounting for the other environmental factors that could result in no combustion (e.g., spark energy, fuel types, temperature, vapor pressure, etc.).

Defendants contend that, because the applicant did not disclose these factors for the three-step test, the asserted claims, viewed in light of the specification and prosecution history, do not inform a POSITA about the scope of the invention with reasonable certainty. Defendants then discuss multiple examples of the three-step test that yield inconsistent results.

The first aspect of Defendants' argument is akin to (although distinct from) prosecution disclaimer because they essentially argue that the applicant disclaimed any other test for satisfying this claim term. The Court disagrees. *See Mass. Inst. of Tech. v. Shire Pharm., Inc.*, 839 F.3d 1111, 1122 (Fed. Cir. 2016) (outlining standard for prosecution disclaimer). The applicant's response and reliance on the Cray Declaration did not clearly and unmistakably surrender claim scope or limit the claims to the three-step test. *See* Doc. 194-15, at 31-42 (Cray Declaration); Doc. 194-22 ¶ 93 (explaining that the three-step test is "one test that could be performed to determine whether a structure is a fuel retention structure that retains a sufficient amount of liquid fuel to provide a fuel vapor-air mixture that is above" the UFL).

Read in its entirety, the applicant submitted these materials to demonstrate three points: (1) the cited prior art required wires to absorb and dissipate heat, (2) the claimed invention operated differently by retaining a sufficient amount of fuel to provide a fuel-air mixture too rich to support combustion, and (3) the prior art devices do not operate like the claimed invention. It is true that the three-step test is one test that could be performed to determine whether a structure is a device that retains enough liquid fuel to provide a fuel-air mixture that is above the UFL. But this test is a demonstration that was offered to distinguish the prior art devices because they did not achieve a fuel-air mixture that was too rich to combust. It did not limit the claims to this test, render this test the only test for determining infringement, or disclaim other tests. Defendants' argument to the contrary makes too much of the response and these materials.

The second aspect of Defendants' argument does not meet the exacting standard for indefiniteness. Defendants must prove their indefiniteness allegation by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 564 U.S. 91, 95 (2011). The Court has determined that a POSITA would have understood "too rich to support combustion" as "above the upper flammability limit." Although Defendants admit that a POSITA would have known that a fuel-air mixture that is "too rich to combust" is also referred to as a mixture above the UFL, they contend the claim is indefinite because the UFL is not razor sharp and may be impacted by different factors. Doc. 219 at 6-7.

But the claims do not require the calculation of a specific UFL. Instead, they require enough fuel to provide a fuel-air mixture above the UFL. And a POSITA would have known that different flammability limits apply to different fuels with different vapor pressures under different atmospheric conditions including different temperatures and pressures and would have known how to account for them. *See, e.g.*, Doc. 194-23 ¶¶ 37-44. A POSITA also would have known how to conduct testing to determine fuel-air mixture and would have known that the flammability range for gasoline was 1.4% to 7.6% gasoline in air. *Id.* ¶ 36; *see also* Doc. 194-24, at 34-36 (discussing testing such as taking a grab sample out of the vapor space and running it through a GC mass spectrometer). Stated differently, a POSITA would have known that a mixture is too rich to burn and above the upper flammability limit when the gasoline vapors in the air are greater than 7.6%. Doc. 194-23 ¶ 36, Doc. 194-22 ¶ 21. Indeed, Defendants' own expert has published the limits and explosive range for fresh gasoline. Doc. 194-6, at 13 (Stevick I); Doc. 226-2, at 8 (Stevick II). And a POSITA would have known how to test a device to determine whether it retained sufficient fuel to provide a fuel-air mixture above the UFL. Doc. 194-22 ¶ 93; Doc. 194-23 ¶¶ 43-47.

Defendants cite several cases. But these cases are inapposite. As one example, in *Teva Pharmaceuticals USA v. Sandoz, Inc.*, the claim limitation at issue was "a molecular weight of about 5 to 9 kilodaltons." 789 F.3d 1335, 1338 (Fed. Cir. 2015). The parties agreed that there were three separate possible meanings for "molecular weight" (i.e., *M*p, *M*w, and *M*n) and that each was calculated in a different way and would yield a different result for a given polymer sample. *Id.* at 1341. The Federal Circuit held the claim "invalid for indefiniteness by clear and convincing evidence" after noting that, during prosecution, the patentee defined molecular weight as *M*w in one instance and *M*p in another. *Id.*at 1344-45. Conversely, the patentee was consistent in its definition and all experts understand "too rich to combust" as above the UFL.[2]

The Court finds this case more like *Presidio Components, Inc. v. American Technical Ceramics Corp.*, where the Federal Circuit determined the claims were not indefinite based on expert testimony that a POSITA could measure the effect of fringe-effect capacitance and the claims did not require that fringe-unit capacitance exist at any particular level. 875 F.3d 1369, 1375-76 (Fed. Cir. 2017). The Federal Circuit explained that, "even where the claims require a particular test result, there may be (and often are) disputes between the parties as to the proper application of the test methodology in the circumstances of an individual case." *Id.* at 1377. But it noted that "those disputes are disputes about whether there is infringement, not disputes about whether the patent claims are indefinite." *Id.*

The parties' arguments on these claim terms encompass many more issues (e.g., the testing performed by their experts). The Court has addressed the principal arguments and considered all the arguments and evidence. The Court finds that Defendants have not met their burden of showing

[2] Defendants directed the Court to *Saso Golf, Inc. v. Nike, Inc.*, 843 F. App'x 291 (Fed. Cir. 2021), at the hearing. But that case is distinguishable because the Nike's experts all testified that the disputed terms did not have a single definition. *Id.* at 295.

by clear and convincing evidence that the claims are invalid as indefinite. Defendants seek absolute certainty, but that is not required by the claim language or the legal standard for indefiniteness. *See Nautilus, Inc.*, 572 U.S. at 910 ("The definiteness requirement . . . mandates clarity, while recognizing that absolute precision is unattainable."). The Court generally agrees with Plaintiff's alternate constructions with a few minor changes concerning technical correctness and readability and construes the claim terms accordingly.

B. Proximate the Main Container Opening

The parties next dispute the construction for proximate. Claim 1 of the '075 Patent is again exemplary of this claim term and is recited above. '075 Patent 11:5-25. The specification discusses the proximate-the-main-container-opening concept at various places. For example, the specification states:

> More particularly, [the present invention] is concerned with an improved fuel container design which seeks to inhibit even the possibility of explosions by intentionally retaining a quantity of fuel proximate to an opening in order to provide a fuel-air mixture within the container that is too rich to support combustion.

'075 Patent 1:20-25. It also states:

> In some preferred embodiments, the structure of the apparatus and the method seek to cause this condition to be maintained in close proximity to the opening such that combustion may not proceed into the interior of the container but rather any explosive event will be suppressed by the retention of fuel immediately proximate the opening.

Id. at 3:5-11. The specification discusses the concept at other places too. *See id.* at 3:20-23, 3:60-65, 4:13-20, 5:40-45, 10:48-56, and 10:64-11:3.

The parties only recently began disputing this term. Defendants contend construction is necessary based on the disagreement between the parties of combustion and no combustion in some of the test. Defendants contend the phrase means "in and around" while Plaintiff contends

Defendants' construction is limiting because it suggests all points "in and around." Plaintiff argues that no construction is necessary.

The Court agrees with Plaintiff. The term has a plain an ordinary meaning that is easily understood by a POSITA and even a lay person. *Phillips*, 415 F.3d at 1313-14. It does not require construction. The Court is mindful of its duty to construe disputed terms, but that duty only exists when the parties show that a term has more than one ordinary meaning. *See O2 Micro Intern. Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361-63 (Fed. Cir. 2008). Defendants have not made that showing; they have not shown that an ordinary meaning of proximate is "in and around." The stray reference to Dr. Roby's declaration is not to the contrary. *See* Doc. 194-23 ¶ 27. The Court finds no construction is necessary for this claim term.

C. Flash Suppressor

The last disputed term is "flash suppressor." Plaintiff contends that Defendants construe the claim term to encompass the prior art flame arrestors. Defendants contend that Plaintiff construes the claim term to import a functional limitation. Claim 2 of the '075 Patent uses this term: "The fuel container of claim 1, wherein the fuel retention structure comprises a flash suppressor." '075 Patent 11:26-27. Claim 1 of the '132 Patent also repeatedly uses the term and states:

> A fuel container comprising:
>
> a hollow tank body defining a fuel-receiving chamber and a main container opening for permitting flow of a liquid fuel into and out of the fuel-receiving chamber;
>
> a fuel dispensing assembly coupled to the tank body proximate the main container opening and configured to dispense the liquid fuel from the container; and
>
> a flash suppressor located proximate the main container opening and extending at least 2 inches downwardly into the fuel-receiving chamber,

> wherein the flash suppressor comprises a plurality of perforations through which the liquid fuel is required to flow in order to dispense the liquid fuel from the container,
>
> wherein the flash suppressor is formed of a synthetic resin material,
>
> wherein the flash suppressor has an internal volume of at least 2 cubic inches,
>
> wherein the flash suppressor is at least 10 percent open,
>
> wherein the average open area of the perforations is at least 0.001 and not more than 0.05 square inches and wherein the flash suppressor is not more than 80 percent open; and wherein the total number of perforations is at least 100 and not more than 10,000 and wherein the average length of the perforations is at least 0.02 inches.

'132 Patent 11:28-53 (emphasis added).

The specification discusses this term. The abstract states:

> When a flash suppressor is employed, the perforations in the flash suppressor can be configured to retain fuel therein after fuel has been dispensed from the container and the flash suppressor is no longer submerged in fuel.

'075 Patent at cover page. The specification next discusses a flash suppressor and states:

> Each of these alternative structures is employed to retain a sufficient quantity of fuel within the container, and in particular in the narrowed neck area such that the fuel-air mixture is too rich to support combustion entering and/or occurring into the interior of the tank portion of the portable fuel tank—even combustion which may be occurring in the environment just exterior to the opening.

Id. at 3:42-49. The specification then explains that the structures present in Figures 7-19 show multiple embodiments of a flash suppressor. *Id.* at 4:13-61 and related figures. These statements in the specification describe the flash suppressor as a structure that retains fuel to inhibit combustion.

The prosecution history also discusses this term. As noted above, the examiner rejected the '075 Patent claims in a December 15, 2014 non-final office action. Doc. 194-14, at 66. The applicant traversed and distinguished the prior art flame arrestors in the following manner:

> After being submerged, a spark generator was inserted within the open end of each of the Justrite and Eagle flame arrestors, and a spark was generated. The spark caused combustion of the fuel retained within Justrite and Eagle flame arrestors. Contrastingly, the spark generator was inserted within the open end of the No-Spill suppressor after the suppressor was submerged in fuel, and a spark was generated. The spark did not cause combustion of the fuel retained within the No-Spill suppressor. Thus, the testing confirmed that the No-Spill suppressor made according to the fuel retention structure of the claimed invention of the present application is capable of retaining a sufficient amount of fuel to create a fuel-air mixture too rich to support combustion, while the wire mesh flame arrestors of Justrite, Eagle, and Rasmussen retain an insufficient amount of fuel to create a fuel-air mixture too rich to support combustion.

Doc. 194-15, at 27-28 (emphasis added) (citations to Cray Declaration omitted). This indicates that the applicant referred to the flash suppressor as a structure for retaining liquid fuel to inhibit an explosion.

The prosecution history for the '132 Patent also discusses this term. The examiner issued a February 10, 2017 non-final office action rejecting originally filed claims 1-20. Doc. 194-16, at 61-66. The applicant interviewed with the examiner and provided a list of topics for the interview that included the following:

> The present invention is directed to a fuel container with a synthetic resin "flash suppressor." The flash suppressor is configured to permit passage of fuel, while preventing combustion within the container by maintaining a high fuel-to-air ratio within the flash suppressor such that there is not enough air to facilitate combustion.

Doc. 194-17, at 26. The applicant filed a response to the non-final office action on July 10, 2017. The applicant did not amend but distinguished the prior art as follows:

> Beneficially, the flash suppressor provided in claim 1 is formed from synthetic resin, as opposed to previously-used flash suppressors, which are generally formed from metal. The flash suppressor of claim 1 can function properly as a flash suppressor because of the specified perforation coverage and sizing. Particularly, the perforations are appropriately positioned on the flash suppressor and sized to permit fuel to pass through the flash suppressor when adding/removing fuel to/from the container. In addition, however, the coverage and sizing of the perforations allow the flash suppressor to retain a sufficient amount of fuel, such that the environment within the flash suppressor is too rich in fuel to support combustion (See, e.g., Application para. 0051). Applicant submits that the prior art of record fails to disclose a flash suppressor with such above-described features.

Doc. 194-17, at 31-32 (emphasis added). The examiner issued a final rejection to claims 1-20 premised on Flider, Rama, Jr., and Flider II on September 13, 2017. Doc. 194-17, at 42-43. The applicant filed an appeal brief again distinguishing the prior art. Doc. 194-18, at 15-30. The applicant noted that "metal arrestors are commonly used in prior art fuel containers" and explained that "[s]uch metal arrestors function to prevent flames or sparks from traveling into the safety cans by distributing heat through the metal of the arrestors." *Id.* at 21. But the applicant then explained:

> Claim 1 is recited to a fuel container with a flash suppressor comprising a plurality of perforations through which liquid fuel must flow to dispense the liquid fuel from the container. As noted above, the claimed flash suppressor is a device configured to inhibit combustion within the fuel container. Claim 1 specifically requires that the flash suppressor be formed from a synthetic resin material. The prior art does not disclose a flash suppressor formed from a synthetic resin material. Flider discloses an arrestor, which can be used to prevent flame or sparks from passing into its safety container. However, the arrestor of Flider is made from metal, which is a requirement for arrestors of the type used in Flider. On the other hand, Rama discloses an apparatus that can be made from a mesh material, such as from plastic. However, the Rama apparatus is not an arrestor, or a flash suppressor as claimed. Instead, the Rama apparatus is a filter apparatus for filtering particulates from fuel. As such, neither Flider nor Rama discloses a flash suppressor formed from a synthetic resin material.

Id. at 24 (first emphasis added, second and third in original). The examiner found the argument persuasive and issued a notice of allowance on June 13, 2018. *Id.* at 35. He also entered an examiner amendment to claim 1. *Id.* at 40.

The parties also offer extrinsic evidence. Dr. Roby states that "a POSITA would have understood the term 'flash suppressor' to mean 'a structure configured to retain sufficient liquid fuel to inhibit the development of an explosive fuel vapor-air mixture event.'" Doc. 194-22 ¶ 108. He highlights the dictionary definition of suppress. *Id.* ¶ 109. He notes that Perry's Chemical Engineers' Handbook has a definition for "flame arrestor" but does not make any reference to "flash suppressor," and he cites several other similar resources discussing a flame arrestor but not mentioning flame suppressor (including the Stevick I and Stevick II references). Doc. 194-23 ¶¶ 54-62. Conversely, Dr. Stevick states that POSITA would understand "flash suppressor" to mean "flame arrestor" and highlights a dictionary definition. Doc. 194-2 ¶¶ 87, 102. Interestingly, Dr. Stevick did not cite any literature references or treatises supporting his assertion or using the terms interchangeably and instead relied on the unsupported declaration of another defensive witness, Samim Safaei. Doc. 194-50 ¶ 60.

After considering the intrinsic and extrinsic record, the Court generally agrees with Plaintiff's construction. The claims, specification, and prosecution history discuss the flame suppressor as a structure configured to retain sufficient liquid fuel to inhibit combustion. Defendants' proposed construction reads on the prior art and covers the flame arrestors repeatedly distinguished during prosecution. The Court recognizes Defendants' arguments about lexicographer and disclaimer, but the Court reads the claim in light of the intrinsic and extrinsic record. Although Defendants certainly highlight some sloppy language during prosecution, *see* Doc. 194-17, at 31-32, this language does not overwhelm the rest of the intrinsic evidence or

constitute a disclaimer. The Court construes "flash suppressor" as "a structure configured to retain sufficient liquid fuel to inhibit combustion."

IT IS SO ORDERED.

Dated: June 23, 2021

/s/ *Holly L. Teeter*
HOLLY L. TEETER
UNITED STATES DISTRICT JUDGE